Application No. 10/695,467

## IN THE DRAWINGS:

Please replace the sheets containing Figs. 2, 3, and 4 with the replacement sheets submitted herewith.

## RECEIVED :410 280 6758 CENTRAL FAX CENTER

DEC 0 7 2006

Application No. 10/695,467

## **REMARKS**

Claims 1-6, 7-12, and 14-16, as amended, are pending herein. Claims 7 and 13 have been cancelled and the limitations thereof have been incorporated into parent claims 1 and 8, respectively. Claims 15 and 16 have been amended to change "server computer" to "host server."

The specification, Abstract, and drawing have been amended to correct the errors noted by the Examiner and to correct other minor typographical and drafting errors. No new matter has been added to the original disclosure by these amendments or the amendments to the claims.

Applicant gratefully acknowledges the interview afforded by the Examiner on December 5, 2006 to discuss proposed amendments to the claims and the cited references to Shorter et al N. 5,291,597 and Johnston et al No. US 2002/0103882. The claims presented herewith are those discussed at the interview. No further amendments have been made to the claims.

As discussed at the interview, it is known in the prior art to have virtual machines running in an idle state and awaiting assignment to a client. It is also known in the prior art to assign a DLU (host system) to a client an to then provision virtual machines within that DLU for the assigned client. The claimed invention does not view individual VIR hosts (DLUs) as an assignable unit. Instead, it views an array of slots formed by all of the known and registered VIR hosts (DLUs) residing on the system, which are made available for assigning to a client with the special network isolation algorithms being applied to create an individual second network for the client. Thus, a student/client request virtual machine slots and the available slots which are identified and assigned to the student according to a load balancing algorithm.

Selected files are then copied from a file repository into the identified virtual machine slots and

Application No. 10/695,467

are formed into a special isolated network (a second network). This method has been shown to be more flexible than Shorter and more scalable than Johnston.

All of the parent claims have been amended to clarify that the host servers are arranged in an array and that machine slots are distributed to create a client network. Parent claims 1 and 8 have further been amended to specify that selected files are copied from the file repository of requested virtual machine slots.

Claims 1-3, 8, 9, and 14-16 were rejected as anticipated by Johnston and 4-7 and 10-13 were rejected as obvious over Johnston in view of Shorter. Reconsideration of these rejections is courteously requested in view of the amendments to the claims and for the reasons set forth below.

Shorter places the virtual machines in idle mode until they are called upon by the system. This is a good performance measure and will result in a better performance that the claimed method of waiting to provision the Virtual Machine "On Demand", but the Shorter method is not scalable to any practical degree. By waiting to provision the virtual machines of the claimed invention, they may be tailored to hundreds of different specs before "spinning them up". This allows the versatility to service customer demand on a truly enterprise level.

Johnston somewhat overcomes this limitation by also provisioning the virtual machines onto a server, but falls short in how they assign the DLUs (applicant's VIRs). Applicant does not view the VIRs as a separate unit assignable to a student. Rather, the slots on the VIRs are viewed as a part of an overall array of slots. The slots are selected from across several machines when necessary. Again Johnston falls short of this solution which scales well.

Application No. 10/695,467

The unique aspect of the claimed networking is that by selecting slots from across a plurality of VIRs, a dynamic network isolation algorithm (using ebtables) is used to create a sandboxed environment for each user.

Allowance of claims 1-6, 8-12 and 14-16 is courteously solicited.

Respectfully submitted,

December 7, 2006

Lawrence E. Laubscher, Jr. Registration No. 28,233

Laubscher & Laubscher, P.C. 1160 Spa Road, Suite 2B

Annapolis, Maryland 21403 Telephone: (410) 280-6608

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence consisting of <u>[9]</u> pages (including cover)is being transmitted to the U.S. Patent and Trademark Office at facsimile No. 571-273-2300 on <u>December 7, 2006</u>.

Shally Hubbard

L:\Station3\Patent\document\23368.amd.wpd

11 Signature